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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/898,123

07/03/2001

Min Soo Park

2060-3-06

2290

35884

7590

01/19/2005

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EXAMINER

CHASE, SHELLY A

ART UNIT

PAPER NUMBER

2133

DATE MAILED: 01/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/898,123	<b>Applicant(s)</b> PARK, MIN SOO	
	<b>Examiner</b> Shelly A Chase	<b>Art Unit</b> 2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-21 is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 5-9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1 to 21 are presented for examination.

#### ***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119, which papers have been placed of record in the file.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 to 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Partalo (USP 6549886 B1) in view of Goodman et al. (*waveform substitution techniques for recovering missing speech segments in packet voice communications*).

Claims 1 and 4:

**Partalo** substantially teaches a system for packet recovery for voice over internet protocol (VoIP) devices, the system comprises: a lost packet interpolation module (320) detecting a missing frame by using a prior frame and time domain harmonic scaling (TDHS) principle (see col. 5, lines 5 to 16). Partalo also teaches that the position of the missing frame is detected (see col. 5, lines 42 et seq.).

Art Unit: 2133

Partalo fails to specifically teach a waveform recovery unit for duplicating a voice data normally received previously to the lost portion; however, Goodman in an analogous art teaches a waveform substitution technique for missing packets wherein the missing packet is substituted by the preceding packet (see pg. 1441 to pg. 1443).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the recovery system for VoIP of Partalo to include waveform substitution as taught by Goodman since, Goodman teaches increasing the maximum missing packet rate is achieved using waveform substitution technique to recover the missing packet. This modification would have been obvious because a person of ordinary skill in the art would have been motivated to employ a know method for reducing the missing packet rate while increasing system performance as taught by Goodman (see pg. 1446 sect. VIII).

As per claim 2, Partalo teaches that the lost packet interpolation module checks a voice packet sequence to detect when a voice packet is missing by using the preceding packet (see col. 5, lines 42 et seq.).

As per claim 3, Partalo teaches that an energy reduction function (170) is used when missing packet is detected only on voice data received (see col. 5, lines 50 to 57).

***Allowable Subject Matter***

5. Claims 5 to 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 10 to 21 are allowed.

7. The following is a statement of reasons for the indication of allowable subject matter: the instant invention is directed to an Internet telephone comprising a waveform discontinuity handling unit for removing waveform discontinuity.

The prior art made of record teaches Internet telephony recovering a loss packet using various methodologies. For instance, Figueiredo et al. (*efficient mechanisms for recovering voice packets in the Internet*), discloses forward error correction as one of many recovery mechanisms for lost packets. Huang et al. (*Robust audio transmission over internet with self-adjusted buffer control*), discloses using a self-adjusting buffer at the sending end for packet recovery. Tang et al. (WO 01/49005 A1), teaches a lost packet recovery device using TDHS to replace the missing packet for VoIP systems.

However, the prior art made of record is different from the instant invention in that the prior art made of record, taken alone or in combination, fails to teach or fairly suggest or render obvious the novel element of the instant invention. specifically, the prior art made of record fails to teach an internet telephone comprising a waveform discontinuity unit as recited in the independent claims.

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shelly A Chase whose telephone number is 571-272-3816. The examiner can normally be reached on Mon-Thur from 8:00 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 703-305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Shelly A Chase